

Application No. 10/711,988
Docket No. A4-1854
Amendment dated October 26, 2005
Reply to Office Action of July 26, 2005

Amendments to the Drawings:

The attached one (1) sheet of drawings includes new Figure 2, which is an enlarged view of the portable unit 12 of Figure 1, and includes a reference to the axes of rotation of the wheels 30.

Attachment(s): Replacement Sheet (1)

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REMARKS

In the Office Action, the Examiner reviewed claims 1-4 and 6-20 of the above-identified US Patent Application, with the result that the drawings were objected to, claims 6 and 11 were rejected under 35 USC §112, second paragraph, claims 1, 2, 4, 9, and 15-18 were rejected under 35 USC §102, claims 3, 10, 12-14, 19, and 20 were rejected under 35 USC §103, and all of the pending claims were rejected under 35 USC §101 as claiming the same invention as claims 1-20 of commonly-assigned U.S. Patent No. 6,820,347 (of which this application is a divisional). Because claims 6-8 and 11 were not subjected to a prior art rejection, Applicant presumes that these claims recite allowable subject matter if the §112 and double patenting rejections are successfully overcome.¹

In response, Applicant has amended the specification and claims as set forth above. More particularly:

A new Figure 2 has been presented that is merely an enlargement of

¹ A claim limitation which is considered indefinite cannot be disregarded. If a claim is subject to more than one interpretation, at least one of which would render the claim unpatentable over the prior art, the examiner should reject the claim as indefinite under 35 U.S.C. 112, second paragraph (see MPEP §706.03(d)) and should reject the claim over the prior art based on the interpretation of the claim that renders the prior art applicable. (Original emphasis; citation omitted.)

MPEP §2143.03.

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that portion of Figure 1 showing the portable unit 12 resting on the upper surface of the cylindrical body 40. Other than adding the axes of rotation 42 of the wheels 30 and rearranging reference numbers for clarity, Figure 2 is an enlarged photocopy of the noted portion of Figure 1.

Paragraphs [Para 16] and [Para 19] of the specification have been amended and new paragraph [Para 16.1] has been presented to make reference to new Figure 2 and identify the axes of rotation of the wheels 30 with reference number 42.

Independent claims 1, 9, 15, and 17 have each been amended to specify that the wheels (30) vertically support the housing (14) on an upper surface of the cylindrical body (40). Support for this amendment can be found in original paragraph [Para 19], original claim 9, and Figure 1.

Independent claim 17 has been further amended to specify that the point located along the length of the chord with the second measurement means (22) is an intermediate point of the chord, as opposed to an endpoint of the chord. Support for this amendment can be found in original paragraph [Para 21] and Figure 1.

Independent claim 17 has also been amended to specify the formula by which the diameter of the cylindrical body (40) is determined. Support for this amendment can be found in original paragraph [Para 22] and original claim

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17.

Applicant believes that the above amendments do not present new matter. Favorable reconsideration and allowance of remaining claims 1-4 and 6-20 are respectfully requested in view of the above amendments and the following comments.

Objection to the Drawings

The Examiner objected to the drawings under 37 CFR §1.83(a) for failing to show every feature of the invention specified in the claims. In particular, the Examiner explained that "the vertical direction of the axis of rotation of the wheels . . . must be shown or the feature(s) canceled from the claim(s)." New Figure 2 is presented with this response in order to comply with the Examiner's instructions. Because new Figure 2 is merely an enlargement of a portion of Figure 1, with the sole difference limited to showing the axes of rotation 42 of the wheels 30, Applicant respectfully believes that new Figure 2 does not present new matter. Accordingly, Applicant respectfully requests withdrawal of the Examiner's objection under 37 CFR §1.83(a).

Rejection under 35 USC §112, Second Paragraph

Claims 6 and 11 were rejected under 35 USC §112, second

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paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that Applicant regards as his invention. Applicant respectfully requests favorable reconsideration in view of the following comments.

The Supreme Court in *Eibel Process Company v. Minnesota & Ontario Paper Company*, 261 U.S. 45, 65-66 (1923), stated the basis for a rejection on the grounds of indefiniteness as follows:

Indefiniteness is objectionable because the patent does not disclose to the public how the discovery, if there is one, can be made useful and how its infringement may be avoided.

MPEP §2173.02 requires that:

Definiteness of claim language must be analyzed, not in a vacuum, but in light of (1) the content of the particular application disclosure, (2) the teachings of the prior art, and (3) the claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made.

MPEP §2173.01 states that the claims merely need to set out and circumscribe the claimed subject matter with a *reasonable* degree of clarity and particularity in order to comply with 35 USC §112, second paragraph. Again, what is "reasonable" is viewed from the standpoint of one possessing the ordinary level of skill in the pertinent art. Therefore, an evaluation of whether a term, phrase

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or description in a claim is indefinite must be made from the perspective of one skilled in the art, including the knowledge and level of skill that would be attributed to those skilled in the relevant art after having the benefit of reading Applicant's disclosure.

The Examiner's concern was for Applicant's recitation in claims 6 and 11 that "the wheels are supported by bearings having diameters larger than the diameters of the wheels." More particularly, the Examiner explained

Claims 6 [and] 11 [are] incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP §2172.01. The omitted structural cooperative relationships are: the relationship between the wheels and the bearings. The specification and drawings do not clearly point out the structural relationship between the wheels and the bearings. Claims 6 and 11 also do not clearly point out the structural relationship between the wheels and the bearings. It is also unclear as to why the bearings have a larger diameter than the wheels.

Applicant respectfully requests reconsideration.

First, one of ordinary skill in the art would not be confused as to the structural relationship between a bearing and a wheel that is rotatably supported by the bearing, especially as Applicant's bearing 34 and wheels 30 are described in Applicant's specification at [Para 19] and shown in original Figure 1. Figure 1 shows (albeit in a very small scale) not only the bearings 34

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and the wheels 30 they support, but also the shafts (unnumbered) that connect the wheels 30 to the bearings 34. As an enlarged photocopy of Figure 1, new Figure 2 better shows these components. Applicant cannot conceive of any person deemed to have ordinary skill in the art as being unable to discern the structural relationship between the bearings 34 and wheels 30 from Applicant's original specification and original drawings.

Second, applicants are free to "define in the claims what they regard as their invention essentially in whatever terms they choose so long as the terms are not used in ways that are contrary to accepted meanings in the art." MPEP §2173.01. At [Para 19], Applicant explains an advantage associated with using wheels 30 having small diameters, and that the wheels 30 portrayed in Figure 1 have diameters smaller than that of the bearings 34 supporting them. As such, Applicant is merely using the diameters of the bearings 34 as a point of reference to define the diameters of the wheels 30, which Applicant is entitled to do under MPEP §2173.01.

In view of the above, Applicant respectfully requests reconsideration of the grounds for rejection under 35 USC §112, second paragraph.

Rejections under 35 USC §102

Independent claims 1, 9, and 15 and their dependent claims 2, 4, 16,

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and 18 were rejected under 35 USC §102(b) as being anticipated by U.S. Patent No. 4,240,206 to Baresh et al. (Baresh), and independent claim 17 was rejected under 35 USC §102(b) as being anticipated by U.S. Patent No. 3,169,323 to Hold. Applicant respectfully requests reconsideration of these rejections in view of the amendments presented above as well as the following comments.

As noted in §2131 of the MPEP:

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. The identical invention must be shown in as complete detail as is contained in the ...claim. The elements must be arranged as required by the claim, but this is not an ipsissimis verbis test, i.e. identity of terminology is not required. (Citations omitted).

Each of Applicant's independent claims 1, 9, and 15 requires wheels (30) that vertically support the housing (14) on an upper surface of the cylindrical body (40), each of the wheels (30) vertically supporting the housing (14) on the upper surface having an axis of rotation (42) oriented in a substantially vertical direction when supporting the housing (14) on the upper surface of the cylindrical body (40).

In contrast, though Baresh discloses wheels 46a and 54b whose axes of rotation are vertical, neither of these wheels 46a and 54b vertically support

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Baresh's apparatus 10 on an upper surface of a tube being evaluated. Instead, Baresh's wheels 46a and 54b merely contact the sides of the tube, and therefore can only serve to laterally locate the tube within the opening of the apparatus 10. It is therefore inherent that, while Applicant's wheels 30 contact the cylindrical body 40 along their edges as shown in Figure 1, the corresponding edges of Baresh's wheels 46a and 54b do not. Instead, it is the cylindrical surfaces of Baresh's wheels 46a and 54b (as well as wheels 46b and 54a) that contact the tube.

In view of the above, Applicant believes that Baresh does not anticipate independent claims 1, 9 or 15 nor any of their dependent claims under the test for anticipation set forth at MPEP §2131, and therefore respectfully requests withdrawal of the first rejection under 35 USC §102.

Applicant's independent claim 17 recites a micrometer for determining the diameter of a cylindrical body by

positioning the first measurement means at one of the graduations on the arm corresponding to one of the multiple chord lengths based on the size of the cylindrical body, the first measurement means locating a terminal of a chord corresponding to the one of the multiple chord lengths;
locating an intermediate point along the length of the chord with a second measurement means; and
determining the diameter of the cylindrical body based on the length and height of the chord with the formula

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$$d = (c^2 + 4h^2)/4h$$

where d is the diameter of the cylindrical body, c is the length of the chord, and h is the height of the chord at the intermediate point.

In contrast, as noted by the Examiner, Hood is limited to measuring the diameter of a cylindrical surface by contacting "diametrically opposed points on the cylindrical surface 130 . . ." (column 2, lines 57-62). Hood does not disclose any means for locating an intermediate point along the length of the diameter (or any other chord) of Hood's cylindrical surface 130. Therefore, Applicant believes that Hood does not anticipate independent claim 17 under the test for anticipation set forth at MPEP §2131, and therefore respectfully requests withdrawal of the second rejection under 35 USC §102.

Rejections under 35 USC §103

Under the §103 rejections, Baresh was applied as the primary reference in combination with patents that, alone or in combination, do not disclose or suggest the orientation required for Applicant's wheels 30 as recited in independent claims 1, 9, and 15, from which all of the claims rejected under §103 depend. Applicant therefore respectfully requests withdrawal of the rejections under 35 USC §103.

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Rejection under 35 USC §101

Claims 1-4 and 6-20 were rejected under 35 USC §101 as claiming the same invention as claims 1-20 of commonly-assigned U.S. Patent No. 6,820,347. Applicant requests that this rejection be held in abeyance until allowable subject matter has been indicated by the Examiner. If appropriate under the circumstances existing at that time, a terminal disclaimer pursuant to 37 CFR §1.321(b) will be submitted which terminally disclaims that portion of the patent issuing from the present patent application which extends beyond the termination date of the patent.


Closing

In view of the above, Applicant believes that all issues outstanding from the Office Action have been addressed, and that the claims define patentable novelty over all the references, alone or in combination, of record. It is therefore respectfully requested that this patent application be given favorable reconsideration

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Should the Examiner have any questions with respect to any matter
now of record, Applicant's representative may be reached at (219) 462-4999.

Respectfully submitted,

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Attachment: Replacement Drawing Sheet